

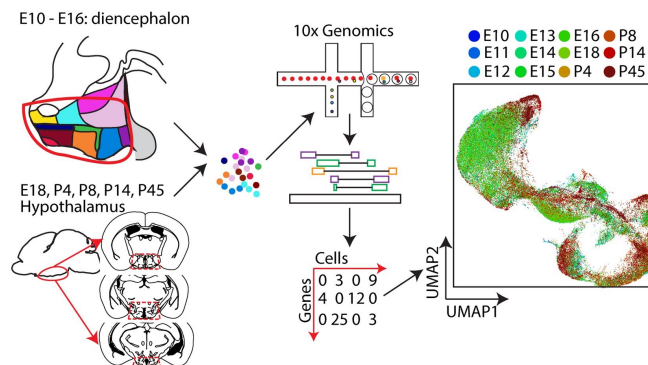


Building the hypothalamus

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The hypothalamus, an ancient brain part, regulates vital homeostatic, adaptive, and reproductive functions. Its core cell types remain conserved across species due to essential roles. My research focuses on data-driven approaches for neurodegeneration and neurodevelopment inquiries. A key achievement is the Hypothalamus Developmental Database (HyDD). This scRNA-Seq atlas covers all hypothalamic development stages, revealing gene expression changes guiding regionalization and neurogenesis. HyDD's cross-species analysis unveiled molecular signals driving early hypothalamic development. Genes promoting or repressing specific identities were identified, aiding the understanding of sleep neuron specification. Moving forward, I'll outline ongoing projects in my new lab.



Friday, September 8th from 13.00 to 13.45 in the Zoophysiology Seminar Room (1131-127)